

<b>Notice of Allowability</b>	Application No.	Applicant(s)	
	10/824,173	VASUDEVAN, SUNDAR	
	Examiner	Art Unit	
	Callie E. Shosho	1714	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 7/6/07.
2. ☒ The allowed claim(s) is/are 1,6,10,14-18,22,24,27-30 and 32-43.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____</li> <li>7. <input type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____</li> </ol> |
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**Statement of Reasons for Allowance**

1. The present claims are allowable over the “closest” prior art Nakamura et al. (U.S. 7,074,843), WO 02/26892, and Nishiguchi (U.S. 2004/0212667) for the following reasons:

Nakamura et al. disclose ink jet ink comprising liquid vehicle possessing pH of 7.5-8.5, microencapsulated pigment, i.e. pigment encapsulated with polymer, wherein the polymer is obtained from hydrophilic monomer such as methacrylic acid and vinyl sulfonic acid and hydrophobic monomer such as styrene. There is also disclosed system for printing an image comprising substrate and ink jet printer as well as method of printing an image comprising ink jetting the ink onto the substrate.

WO 02/26892 discloses inkjet ink comprising liquid vehicle and polymer enrobed pigment, i.e. pigment encapsulated with polymer, wherein the polymer is obtained from 20-90% hydrophobic monomer such as styrene and 5-80% hydrophilic monomer such as vinyl sulfonic acid as well as methacrylic acid. There is also disclosed system for printing an image comprising substrate and ink jet printer as well as method of printing an image comprising ink jetting the ink onto the substrate.

Nishiguchi discloses first ink jet ink comprising liquid medium possessing pH of 7-10 and pigment encapsulated by graft polymer wherein the graft polymer is obtained from 10-50% hydrophilic monomer such as vinyl sulfonic acid and methacrylic acid and 40-90% hydrophobic monomers such as styrene. There is also disclosed system for printing an image comprising substrate and ink jet printer for printing onto the substrate comprising the first ink jet ink and second ink jet fluid, i.e. reactive liquid, as well as method of printing an image comprising ink jetting the ink and the fluid onto substrate

However, there is no disclosure or suggestion in Nakamura et al., WO 02/26892, or Nishiguchi et al. of pigment encapsulated with a polymer wherein the polymer includes styrene-trifluoroacrylic acid acid-vinyl sulfonic acid copolymer, styrene- $\alpha$ -(trifluoromethyl)acrylic acid-vinyl sulfonic acid copolymer, or styrene-trifluoroacrylic acid copolymer as required in each of present claims 1, 18, and 30. Further, there is no disclosure or suggestion in Nakamura et al., WO 02/26892, or Nishiguchi et al. of pigment encapsulated with a polymer said polymer being a polymerization product of at least a first monomer having hydrophilic group selected from the group consisting of  $\alpha$ -fluorocarboxylic acids,  $\beta$ -fluorocarboxylic acids, and combination thereof and a second monomer having a hydrophobic group as required in present claim 37.

Thus, it is clear that in Nakamura et al., WO 02/26892, and Nishiguchi et al., either alone or in combination, do not disclose or suggest the present invention.

Further, applicant's amendment filed 7/6/07 overcomes the claim objections and 35 USC 112, second paragraph rejections of record.

In light of the above, it is clear that the rejections of record are untenable and so, the present claims are passed to issue.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Callie E. Shosho  
Primary Examiner  
Art Unit 1714

CS  
9/15/07